DVD/DVB DECODER

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ABSTRACT OF THE DISCLOSURE

The decoder, in accordance with the present
invention, includes a stream demultiplexer that
10   demultiplexes and depacketizes a stream of DVD or
DVB data packets, stores the demultiplexed and
depacketized data in a data buffer and
subsequently generates a tag specifying the time
stamp of the data and the location of the stored
15   data in the buffer. The CPU, using the information
generated for each tag, generates a task
definition packet instructing the audio and the
video decoders about the location and the time
that a particular data in the buffer must be
20   decoded, simplifying the operation and design of
the decoders. The generation of the task
definition packets and the decoding of the data
are synchronized with respect to a synchronizing
signal generated within the decoder. Because the
25   CPU is not required to demultiplex and depacketize
the data, it need not have high processing power
and is thus relatively inexpensive. Under the
normal operating conditions, the CPU is
interrupted only during the occurrence of the
30   synchronization signals. The generation of the

task definition packets and the decoding of the
data is pipelined. Therefore, during each
synchronization signal, the decoder decodes a data
packet in accordance with a task definition packet
that the CPU generated during the previous
synchronization signal. The audio decoder detects
the audio sync word and so informs the CPU which
along with the time stamp of the data provided
thereto by the stream demultiplexer determines the
presentation time of the audio frame.